

CLAIMS

What is claimed is:

1. A method of dynamically detecting a location of a mobile node, comprising:
examining information pertaining to the mobile node;
selecting a location module based on the information; and
executing the location module to determine whether the mobile node is on an
intranet or an external network.
2. The method according to Claim 1 wherein examining the information pertaining
to the mobile node further comprises examining information from a
configuration database and examining dynamic information obtained when the
mobile node starts up.
3. The method according to Claim 2 further comprising deciding whether to retain
the location module based on the dynamic information.
4. The method according to Claim 3 wherein deciding whether to retain the
location module further comprises selecting an alternate location module if the
dynamic information indicates the alternate location module is more suitable.
5. The method according to Claim 1 wherein applying the location module further
comprises causing the mobile node to execute instructions in the location
module.

6. The method according to Claim 5 wherein causing the mobile node to execute instructions in the location module further comprises causing the mobile node to register with an internal home agent and an external home agent.
7. The method according to Claim 5 wherein causing the mobile node to execute instructions in the location module further comprises examining a Dynamic Host Control Protocol ("DHCP") reply to determine a domain name.
8. The method according to Claim 5 wherein causing the mobile node to execute instructions in the location module further comprises causing the mobile node to compare its care of address ("COA") against a CIDR block address in a configuration database.
9. An article comprising a machine-accessible medium having stored thereon instructions that, when executed by a mobile node, cause the mobile node to:
examine information pertaining to a mobile node;
select a location module based on the information;
execute the location module to determine whether the mobile node is on an intranet or an external network.
10. The article according to Claim 9 wherein the instructions, when executed by the mobile node, further cause the mobile node to examine information from a configuration database and examine dynamic information obtained when the mobile node starts up.

11. The article according to Claim 10 wherein the instructions, when executed by the mobile node, further cause the mobile node to decide whether to retain the location module based on the dynamic information.
12. The article according to Claim 11 wherein the instructions, when executed by the mobile node, further cause the mobile node to select an alternate location module if the dynamic information indicates the alternate location module is more suitable.
13. The article according to Claim 9 wherein the instructions, when executed by the machine, further cause the mobile node to execute instructions in the location module.
14. The article according to Claim 13 wherein the instructions, when executed by the mobile node, further cause the mobile node to register with an internal home agent and an external home agent.
15. The article according to Claim 13 wherein the instructions, when executed by the mobile node, further cause the mobile node to examine a Dynamic Host Control Protocol ("DHCP") reply to determine a domain name.

16. The article according to Claim 13 wherein the instructions, when executed by the mobile node, further cause the mobile node compare its care of address (“COA”) against a CIDR block address in a configuration database.
17. A mobile node capable of dynamically determining its location, comprising:
a memory capable of storing a configuration database containing static information pertaining to the mobile node, the memory further capable of storing dynamic information obtained when the mobile node starts up; and
a processor capable of executing an appropriate location module selected by a policy engine, the appropriate location module selected by the policy engine based on the static information and the dynamic information, wherein the appropriate location module is capable of causing the mobile node to determine whether it is on an intranet or an external network.
18. The mobile node according to Claim 17 wherein the processor is further capable of causing the policy module to select a first location module based on the static information in the configuration database, and wherein the processor is further capable of causing the policy engine to determine whether to retain the first location module.
19. The mobile node according to Claim 18 wherein the processor is further capable of causing the policy engine to determine whether to retain the first location module based on the dynamic information.

20. The mobile node according to Claim 19 wherein the processor is further capable of causing the policy engine to select an alternate location module as the appropriate location module if the dynamic information indicates the alternate location module is more suitable.
21. The mobile node according to Claim 17 wherein the processor is further capable of executing instructions in the appropriate location module.
22. The mobile node according to Claim 21 wherein the processor is further capable of causing the mobile node to register with an internal home agent and an external home agent.
23. The mobile node according to Claim 21 wherein the processor is further capable of examining a Dynamic Host Control Protocol ("DHCP") reply to determine a domain name.
24. The mobile node according to Claim 21 wherein the processor is further capable comparing the mobile node's care of address ("COA") against a CIDR block address in the configuration database.